M&C Folio No P52524US,JP

19

ABSTRACT

A Vertical Cavity Surface Emitting Laser

A semiconductor laser device (15) comprises a substrate (16). A first mirror structure (17), an active region (18) and a second mirror structure (19) are disposed in this order over the substrate (16). The second mirror structure has a first portion (28) having a first width (W₁) and a second portion (29) having a second width (W₂) less than the first width (W₁). The first portion (28) of the second mirror structure (19) is disposed between the second portion (29) of the second mirror structure (19) and the active region (18). An etching stop layer (23)is provided between the first portion (28) of the second mirror structure (19) and the second portion (29) of the second mirror structure (19). A contact (24) is disposed on the surface of the first portion of the second mirror structure, where it is not covered by the second portion of the second mirror structure.